

# **MIDDECK 0-GRAVITY DYNAMICS EXPERIMENT**

## **FLUID SLOSH EXPERIMENTS**

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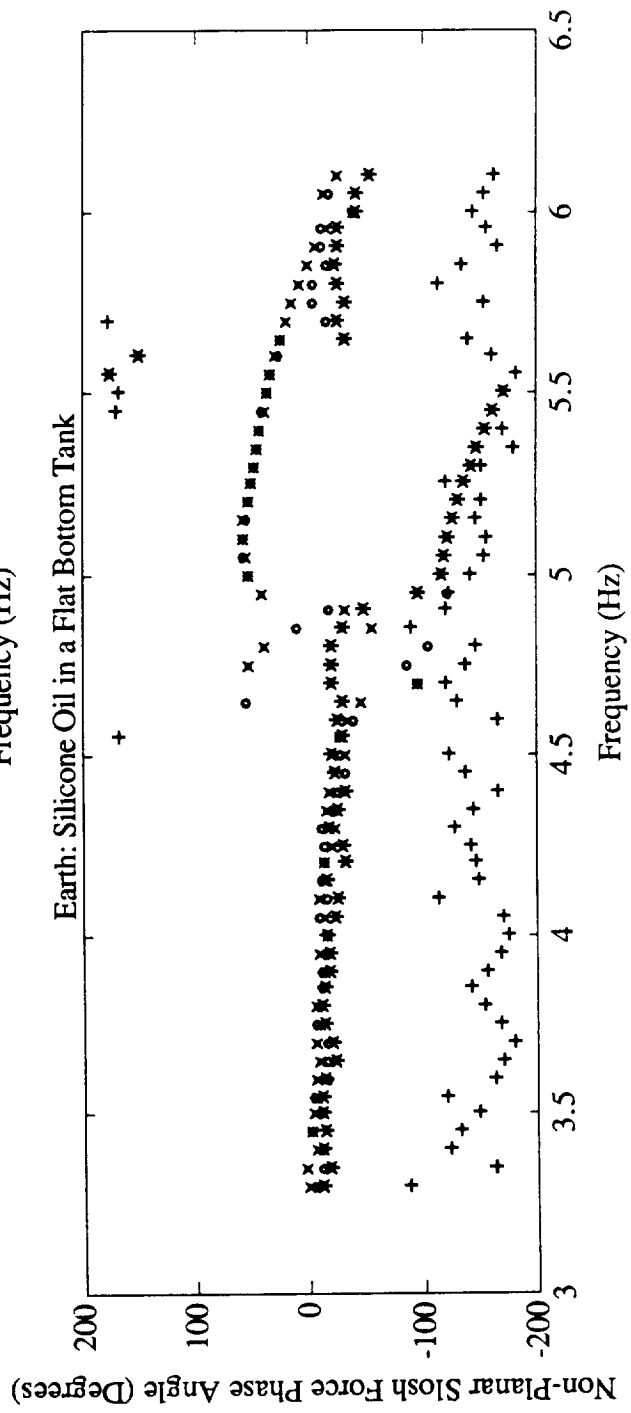
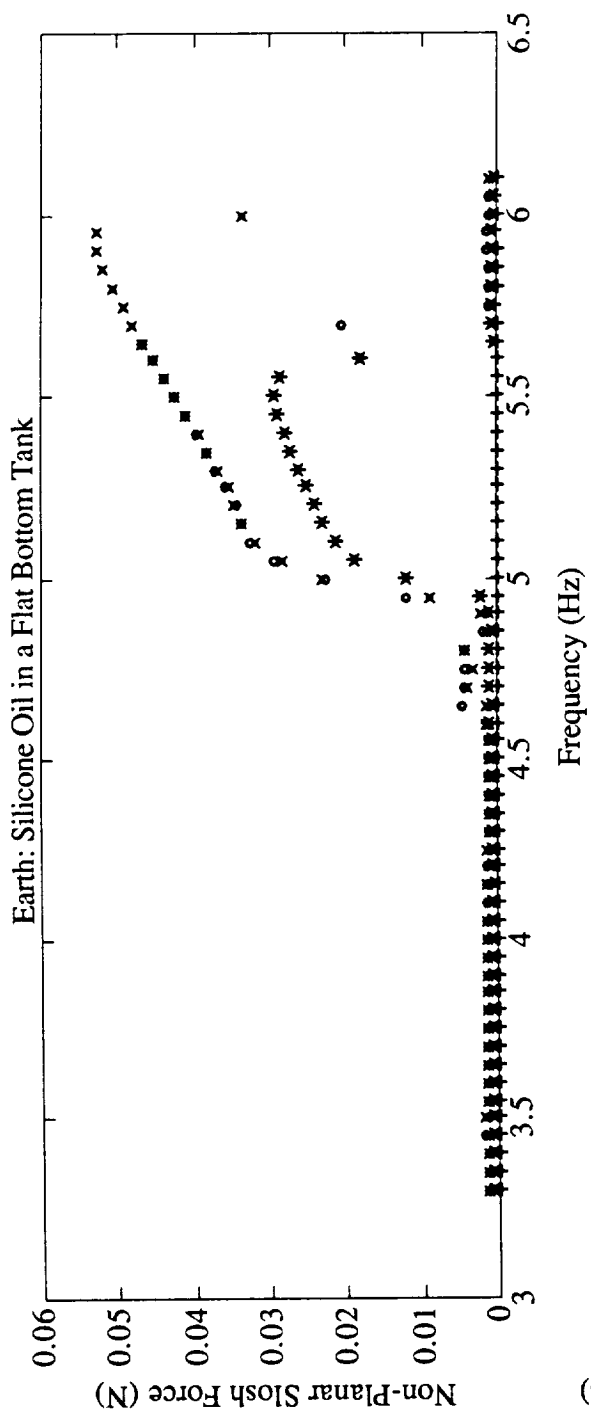
## Summary Preliminary Results

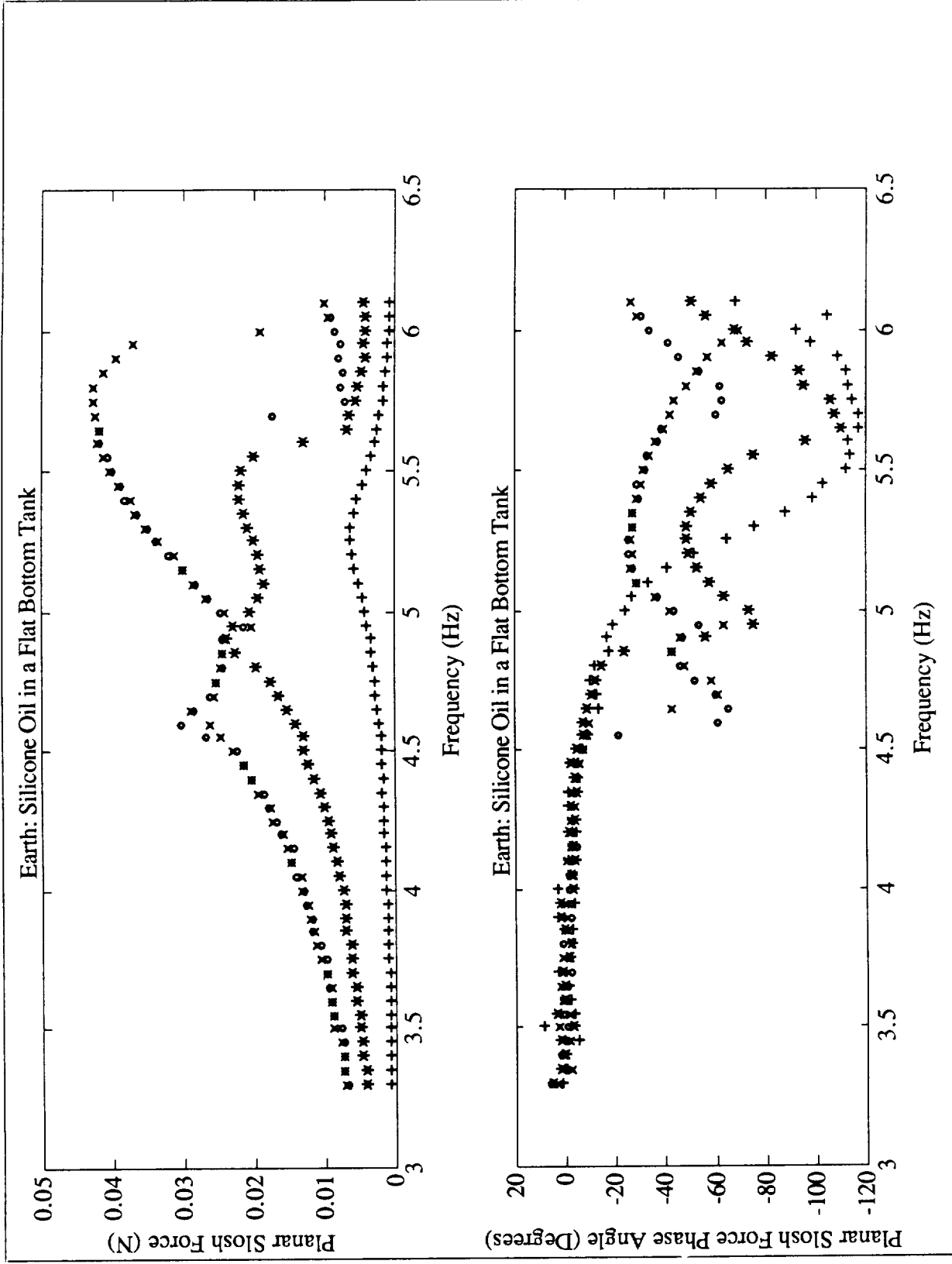
- More benign nonlinear behavior than observed on earth
- Modal damping ratios and frequencies different from predicted

## Typical Results

Silicone Oil (3.1 cm Cylindrical Tank with a Flat Bottom):

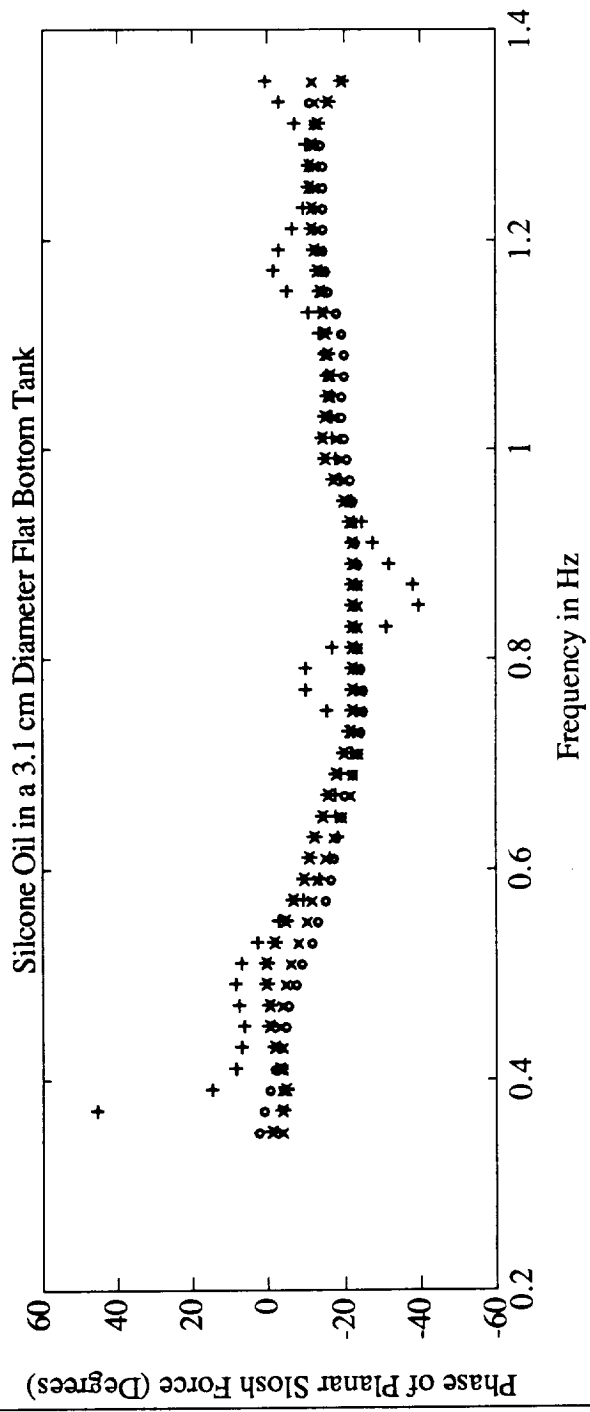
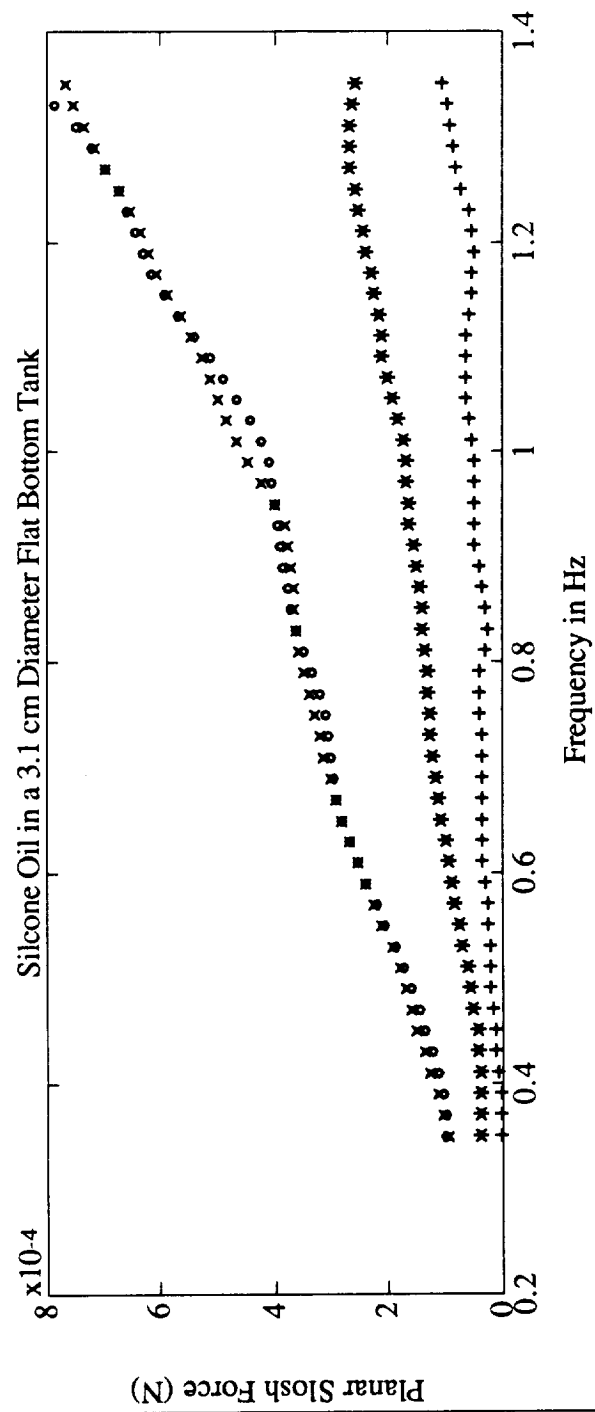
Earth:

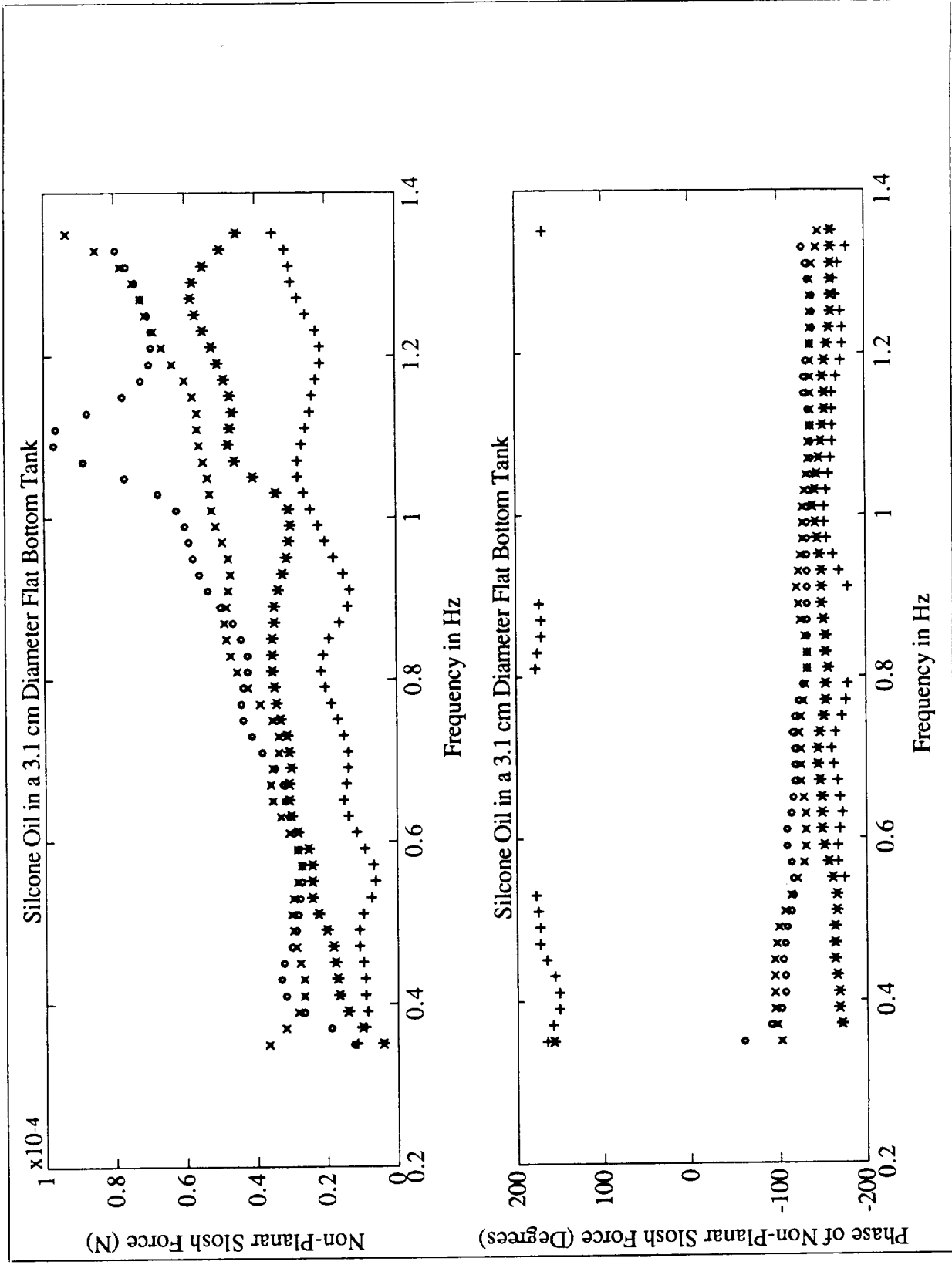




Silicone Oil (3.1 cm Cylindrical Tank with a Flat Bottom):

Space:

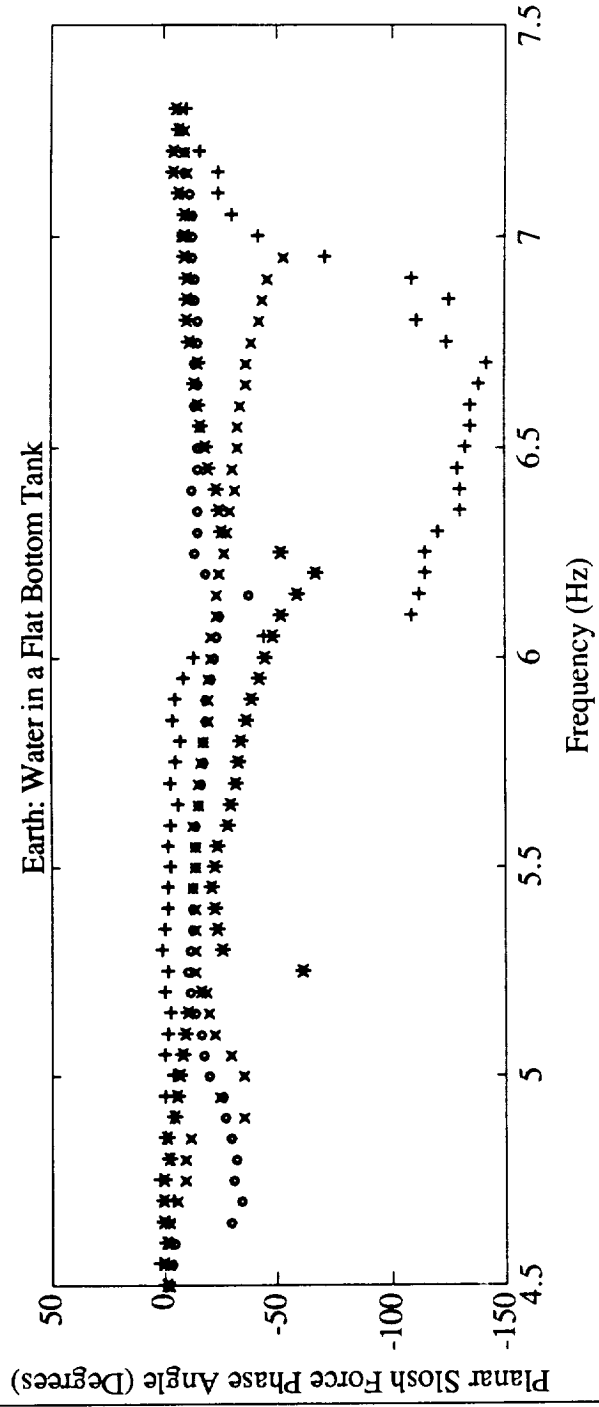
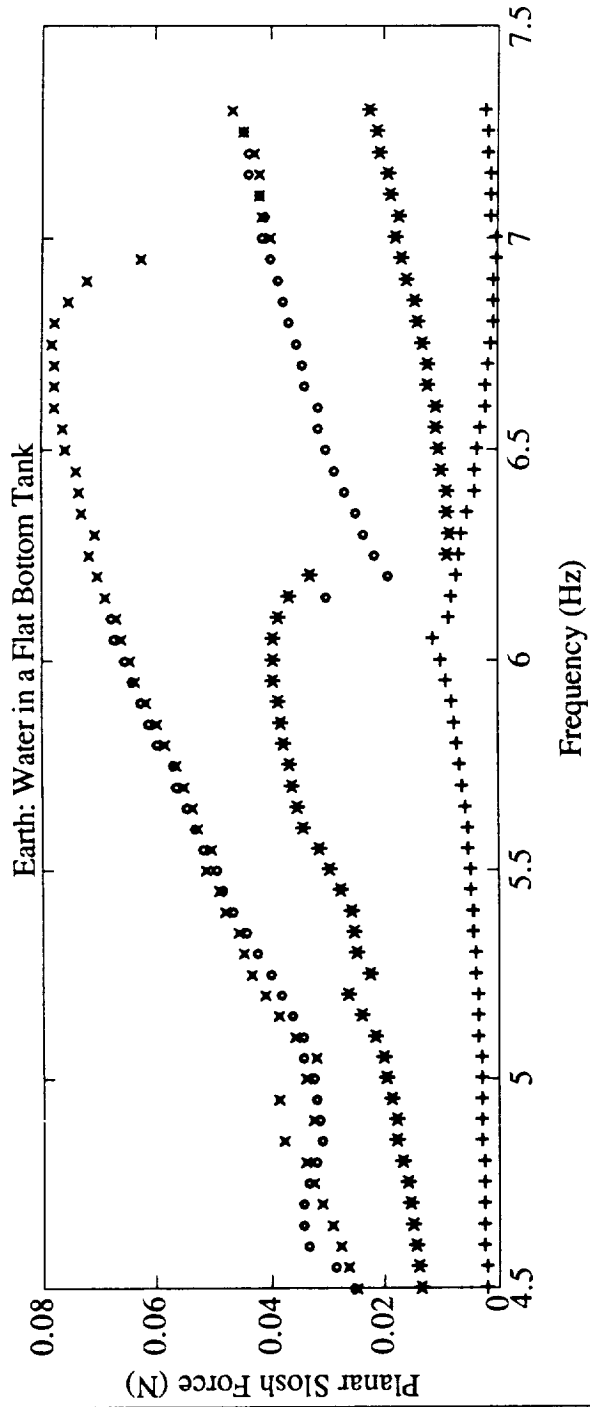




Water (3.1 cm Cylindrical Tank with a Flat Bottom):

Earth:





Water (3.1 cm Cylindrical Tank with a Flat Bottom):

Space:

